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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/694,006

10/28/2003

Yutaka Shibahashi

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09/19/2006

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EXAMINER

LOWEN, ALYSSA

ART UNIT

PAPER NUMBER

3711

DATE MAILED: 09/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/694,006

Applicant(s)

SHIBAHASHI ET AL.

Examiner

Alyssa M. Lowen

Art Unit

3711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 9-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 15 and 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 10/28/03 & 1/30/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election without traverse of Species I, which includes claims 1-8 and 15-16 in the reply filed on 7/10/06 is acknowledged.

***Information Disclosure Statement***

2. The information disclosure statements (IDS) submitted on 10/28/03 and 1/30/04 are in compliance with the provisions of 37 CFR 1.97 and 37 CFR 1.98. Accordingly, the information disclosure statement is being considered by the examiner.

***Priority***

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 6-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims disclose that the "photochromic layer is a compact" and the "color-changing means is a sheet-shaped compact" it is unclear what is meant by the term "compact" in the claims. Claim 8 further discloses a "rapping image" it is unclear what is intended by this limitation as well.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Gordon (2460221). Gordon discloses a method for alternately expressing a color-memorizing photochromic function in a toy element by arranging a sheet-shaped color-changing means (25) under a contacted or non-contacted condition (Figs. 3 & 4), which contains a light-shading pigment (column 2 lines 54-57) capable of shading at least ultraviolet rays (column 2 lines 54-60 and column 3 lines 1-2), to a toy element having a photochromic layer (13) coated on a sheet (12) which maintains a coloring state by developing a color (column 2 lines 1-4) through the irradiation of ultraviolet rays or sunlight containing ultraviolet rays by means of an ultraviolet irradiator (column 2 lines 5-7) and changes into decolorizing state through its decolorization by the irradiation of visible light when the color-changing means changes the photochromic layer of the coloring state into decolorizing state by cutting off ultraviolet rays of sunlight and thereby effecting irradiation of visible light (column 3 lines 7-16) and maintains the changed state, so as to express a function to memorize and maintain coloring and decolorizing states alternately.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 2-7 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon, Kamada (5208132) and Tomonaga (2002/0114956). Gordon discloses the basic inventive concept, substantially as claimed, with the exception of the photochromic layer being formed of a diaryl ethane compound that is included in microcapsules and includes a binder resin. Kamada discloses an organic photochromic compound that is microencapsulated (column 2 lines 30-34) and can be combined with a binder resin (column 5 lines 38-44) for use with a plurality of articles such as toys (column 6 lines 20-27). The photochromic material can also be combined with a dye or pigment (column 8 lines 11-15). It would have been obvious to one of ordinary skill in the art from the teaching of Kamada to modify the coating of Gordon so as to include a microcapsules and binder resin in order to be able to apply a photochromic material to an object that has a high resistance to light when subject to repeated use making it more durable (column 2 lines 22-29). Tomonaga discloses that diaryl ethane is an organic compound that exhibits photochromic properties (page 1 paragraph 4). It would have been obvious to one of ordinary skill in the art to use diaryl ethane as the organic photochromic compound since it has been held that a mere selection of known materials on the basis of suitability for the intended use would be entirely obvious. With

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regard to claims 6 and 7 and the photochromic layer including a thermoplastic resin and the color-changing means including a transparent plastic, the examiner notes that mere selection of known materials as recited in claims 6 and 7, on the basis of suitability for the intended use would be entirely obvious. Therefore, it would have been obvious to one of ordinary skill in the art to provide the references with the materials recited in the claims in order to use known materials suitable for the intended use. *See in re Leshin, 125 USPQ 416 (CCPA 1960).*

10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon, Kamada and Tomonaga. The references disclose the basic inventive concept, substantially as claimed, with the exception of an image arranged inside the sheet-shaped compact. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to include an image because Applicant has not disclosed that an image provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well without an image because the color-changing means would be able to change the color of the toy while being irradiated with light.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alyssa M. Lowen whose telephone number is 571-272-2684. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eugene Kim can be reached on 571-272-4463. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AML



EUGENE KIM  
SUPERVISORY PATENT EXAMINER